

Farnborough Noise Group – Consultation response – January 2024

Farnborough Airport FASI-S ACP. Stage 2 Stakeholder Engagement Baseline Scenarios & Comprehensive List of Options

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Overarching Comment

Farnborough Noise Group (FNG) has an important role to play as it provides factual and impartial information to the public, a large number of councils and MPs. There is no other group with the level of technical knowledge of changes at Farnborough Airport and the way they will impact the community. Despite this, it is clear that FAL does not want to engage with FNG and does not answer questions, but it does not have that choice. It is required to do so. It was evident from the FASI-S consultation meeting that there are a considerable number of points and clarifications that need to be addressed before a meaningful discussion can occur regarding FASI-S. If FAL is not going to have this discussion, it is not applying the Gunning Principles and the consultation is therefore not meaningful or valid. The public have already experienced this in the Farnborough Airspace Change Proposal (ACP).

The fact that FAL does not recognise its responsibility to resolve issues relating to airport's operations and thinks it is the public's responsibility to do this beggars belief (e.g. noise data not being collected in the PIR when the CEO of the CAA committed to do so to MPs, and the public expected to resolve this). Nor does FAL, CAA, DfT and RBC bouncing FNG around for months do anything for their credibility or the public's faith in these organisations, or due process.

While FAL persists in wanting to use metrics that support its narrative, such as measuring emissions per tonne of aircraft flown to hide the inefficiencies of private jet travel rather than emissions per passenger mile that are an industry standard (how would that work comparing the carbon footprint of train travel by measuring the weight of the train rather than the number of passengers?), people will just not trust what FAL says.

Given the potential impact that airspace changes might have on the quality of people's lives, the value of their properties and the health of their families, these are not issues that will just go away if ignored. FNG has repeatedly requested engagement and proper dialogue with FAL. We urge you to take up this offer as the alternative is a legal one.

This stage of the process is the "*Baseline scenarios & Comprehensive List of Options*". However:

- There is no baseline as basic information such as noise and emissions have not been measured so it is not clear what the baseline is
- The list of options is not comprehensive and the outcome from this stage appears to be a foregone conclusion (there is only one option – the current unapproved airspace change and an additional route to Biggin Hill).

Summary Points

The CAA's Airspace Modernisation Strategy (AMS) is technically complex and requires a good understanding of aviation procedures to interpret it. However, the main considerations just require common sense.

The AMS aims to increase the capacity of flights in the UK. This will result in greater emissions that will breach the law (Climate Change Act 2008). The aviation industry is pinning its hopes on the availability of low emission fuels and electric/hydrogen powered aircraft – none of which are commercially viable and will not be available to any scale in the next twenty years at least. This is a view expressed by many authoritative and independent bodies such as The Royal Society¹ and expressed by government parliamentary committees². It is also a view stated by the government's Climate Change Committee that concludes there should be no expansion in aviation until emissions from it have started to reduce³.

We know that the number of flights has to be reduced to meet climate change (because climate change will decide for us if we don't) so the reality is that this AMS exercise should be stopped and it should be re-started on the basis of designing more efficient use of airspace with half the number of flight operations, not double. Unless the UK were to abandon net zero (in which case nothing really matters anymore, including this proposal), AMS will never see the light of day as it will be caught up in hugely expensive legal challenges for decades, as seen with Heathrow's proposed third runway.

FAL's contribution to the AMS is via the FASI-S procedure. The main issue with FAL's contribution is that yet again it only considers the impact of flightpath change on FAL aircraft but the changes to flightpaths affect all aircraft and it is all aircraft that the public are impacted by. There are more General Aviation aircraft (helicopters, light aircraft, military aircraft, etc) than there are commercial aircraft and private jets. Many of these are older, much noisier and flying lower so have a much greater impact on noise disturbance to people on the ground. Yet they aren't even considered in the FASI-S proposal. This is all very convenient and a great way to under-represent the situation. The result is that the consultation should not be seen as an impartial and comprehensive evaluation – because it isn't.

The CAA states the objective of the AMS as being *"to deliver quicker, quieter and cleaner journeys and more capacity for the benefit of those who use and are affected by UK airspace"*. However, airspace is for everyone – not just the aviation industry. The desires of the aviation industry must be balanced with the needs of everyone. This includes people who do not fly, nature/wildlife and the environment. It also needs to be balanced with the harm caused by increased flights such as GHG emissions, atmospheric and noise pollution. There is substantial scientific evidence linking aviation pollution and noise to deaths and the case of Ella Kissi-Debrah shows that these cannot be ignored.

There are fundamental problems with the objectives that have been set for FASI-S and as long as the objective are wrong, the conclusions will be wrong:

¹ <https://royalsociety.org/-/media/policy/projects/net-zero-aviation/net-zero-aviation-fuels-policy-briefing.pdf>

² <https://committees.parliament.uk/committee/62/environmental-audit-committee/news/199110/including-aviation-emissions-in-carbon-budgets-new-technologies-and-zero-carbon-aircraft-eac-offers-verdict-to-tackle-emissions-in-aviation/>

³ <https://www.theccc.org.uk/publication/2023-progress-report-to-parliament/>

- 1) **Quicker journeys** rely on going faster (using more fuel and therefore emissions) or flying a more direct route (over areas that should be less overflown such as protected environments and rural areas). In the future, aircraft must fly slower to use less fuel.
- 2) **Quieter journeys** are generally not achievable unless aircraft fly higher which would be a desirable outcome from any change in airspace. New aircraft are generally as noise optimised as they can be but a very large number of aircraft operating are decades old and, short of banning them, the noise they generate will not change. Doubling the number of aircraft (even new ones) will result in more noise regardless of each journey being quieter.
- 3) **Cleaner journeys** require lower emission aircraft powered by new types of engine (electric/hydrogen) that are not available now and will not be available at scale in the next twenty to thirty years⁴.
- 4) The way to achieve the objectives of the AMS for the benefit of all stakeholders is not to **increase capacity**, it is to fly less, and that requires a different airspace design to that proposed in FASI-S.

The south east is already jam-packed with airports and there is hardly any airspace that isn't restricted. It is crazy to try and ram in more controlled airspace for private jets when there are only a few thousand ultra-wealthy people a year using them (we estimate 2,000). Where is the balance of needs in that? Private jets have been pushed out of commercial airports because the airports made more money using the capacity for commercial flights. Maybe the ultra-wealthy private jet users should pay more for the privilege of jetting off for a weekend of skiing rather than finding cheaper locations to operate from and destroying what quiet areas we have left.

Where FNG does agree with the CAA is that the current airspace is a poor design as it has been cobbled together over time which has resulted in many conflicts and operational challenges. There is no doubt that re-designing airspace is difficult but necessary to meet the objectives of all stakeholders. Technology can help with this but not by increasing capacity. It can allow the noise disturbance to be spread and for these new flightpaths to be safer. It also allows the CAA to track and monitor aircraft that are not complying with aviation regulations – something the CAA expects the general public to monitor and report.

There are a number of key points to highlight with FAL's FASI-S proposal. There are more detailed points covered later in this document.

Point 1:

Areas such as National Parks/AONB are supposed to be protected from aviation noise under Air Navigation Guidance 2017. However, the design principles adopted by the CAA in FASI-S (and the FAL ACP previously) are in direct contradiction to the guidance as the intention is to put more flightpaths over rural areas. The design principles do not recognise that rural areas have much lower ambient noise levels than urban areas and have populations who have chosen to live in rural areas because they are quiet, so the disturbance and health impacts caused by aircraft noise is far greater than in urban areas.

Point 2:

The CAA is promoting Performance Based Navigation (PBN) where aircraft fly using GPS navigation along exactly the same tracks. There are consequences from this. First, it means that the CAA can fit in more flightpaths, thus increasing capacity. Second, it means that anyone under a flightpath, or multiple flightpaths, is under a "noise sewer" (CAA terminology) as flights are highly concentrated. Heathrow and Gatwick are planning for 2 million movements a year. That is an absolutely staggering number of flights and will result in constant aircraft noise all day and most of the night for large

⁴ <https://stay-grounded.org/greenwashing/>

areas of the south east of England, some areas of which are not currently overflowed. Apart from the health impact of such noise, the financial impact is huge. We estimate that FAL's proposed expansion of flights at Farnborough would reduce property values in the local area by at least £2.5bn. This far outweighs any economic benefits that are suggested in the Need Case for expansion. Expansion of capacity under FASI-S will have a much bigger impact on property values across a much larger area.

Point 3:

The design principles state the AMS "*Shall not constrain the ability to meet forecast demand for Farnborough Airport*". FAL has already stated in writing that it has capacity for 100,000 movements (it currently has a licence for 50,000 movements and it operating at 32,000 movements a year). Changes in airspace within FASI-S will not have any bearing on FAL's operational capacity now or in the future.

Point 4:

Design Principle 4b states the AMS shall enable "*a reduction in CO2 emissions per flight from Farnborough aircraft*". Emissions from Farnborough Airport's flights are 30 – 40 times the emissions of an equivalent commercial flight (per passenger mile) because 40% of flights are empty and on average there are only 2.5 passengers per plane. FAL has submitted a planning application to increase the size of aircraft it wants to operate. If FAL wants to achieve a reduction in emissions per flight, it should operate smaller aircraft, reduce the number of empty flights and cease operating leisure flights that it does not have a licence for.

Point 5:

Design Principle 4d states a "*reduction in the reliance on tactical intervention*". The provisional change in airspace implemented in 2020 was supposed to result in aircraft flying defined flightpaths with less input from air traffic control (NATS). This was projected as one of the main benefits of the ACP adoption. A significant number (20 – 30%) of flights do not follow the flightpaths prescribed in the ACP because pilots are given the choice to fly the routes they want to in controlled airspace. If pilots are not instructed what height they should fly at, they will fly at heights and flightpaths they choose. Often these are at 1,000ft (and sometimes below), causing more noise than predicted.

Point 6:

Design Principle 6b states "*minimise population numbers newly overflowed*". However, Farnborough Airport's ACP (that has not yet been adopted) resulted in a significant number of people "*newly overflowed*", which is one of the reasons why there have been so many complaints and objections. FASI-S should therefore include these people as "*newly overflowed*" as they chose to live in quiet rural areas that were not overflowed when the ACP or FASI-S was started. Furthermore, the CAA persistently selects wording that suits its objectives and "*minimising*" means nothing as it is entirely subjective and not enforceable.

Point 7:

Design Principle 6c states "*avoid overflying the same communities with multiple routes to & from Farnborough Airport*". The FASI-S consultation meeting on 5th December 2023 went to great lengths to explain that the flightpaths that have been implemented in the current (unapproved) ACP are the only viable options and will remain as they are in the FASI-S proposal. These flightpaths result in the same people being constantly overflowed.

Point 8:

Design Principle 6d states "*avoid overflying the same communities with Farnborough's routes and those routes to & from other airports below 7000ft*". This is a valid objective but most of the

disruptive flights to/from Heathrow, Gatwick, Southampton, Luton, etc are operating above 7,000ft and still cause noise disturbance at that altitude. In fact, in rural areas where ambient noise is low, aircraft can easily be heard indoors at 35,000ft. If all noise was included, rather than just Farnborough aircraft under 7,000ft, it is likely that the current situation would be above the “harm” level. On average, aircraft can be heard for 51 minutes in every hour during the day in rural areas if all aircraft are included. The design does not include the large number of General Aviation aircraft using the same flightpaths to Fairoaks and Blackbushe that are overflying people already overflown by FAL aircraft on the new flightpaths.

Point 9

Throughout the CAA’s documentation and the FASI-S documentation, altitudes are used. Altitude is measured as feet above sea level. Conversely, height is measured as feet above the ground, which is how people actually experience aircraft flying over them. Because we live in a county that is above sea level and has hills, the data provided in the consultations is misleading as aircraft are actually much closer to people on the ground than the data suggests when using altitude. Therefore, suggesting aircraft don’t make significant noise at an altitude of 7,000ft when the ground height varies significantly is misleading.

Detailed Review

There are several more detailed points to make from the consultation material:

Stage 1 Recap – Page 8:

FAL’s Needs Statement assumes its ACP has met its objectives which it has not. Nor can it be assumed that the PIR has been completed when it is six months overdue. The 2020 ACP and the associated PIR are based on a fixed 10-year flight plan (As stated in PIR Data Request, Traffic Figures, Section C *“Reconfirmation that there have been no factors that would cause a material change to the traffic forecasts provided in support of the original proposal, i.e. that the original forecasts are still reasonable”*). FAL has proposed a new 10-year flight plan forecast by submitting a planning application for expansion. Either the ACP is now invalidated or the planning application is not valid. The two are mutually exclusive.

FAL’s Needs Statement says FASI-S will *“create the capacity for efficient growth, appropriately manage the adverse effects of aircraft noise and reduce CO2 emissions.”* These are false statements as capacity increases are a planning decision and not related to airspace changes, as the CAA repeatedly informs us. The number of noise complaints and emissions will increase as a result of FASI-S. It is not possible to increase the number of flights and reduce emissions. FAL’s current planning application for expansion results in the airport’s Scope 3 emissions increasing from the current 200,000 tonnes CO2/year to over 1m tonnes CO2/year.

Stage 1 Recap – Page 9

The first point says that the methodology for assessing Safety will be set out in Stage 2. This document is Stage 2 and there is no Safety Methodology. The design principle issues have been covered earlier in this response.

The Design Principles point 2 states they must accord with *“a) the CAA’s published airspace modernisation strategy (CAP1711) and any current or future plans associated with it, and b) Air Navigation Guidance 2017 & other relevant policy and legislations”*. However, repeated questions seeking clarification have been ignored.

Point 3 states the design *“Shall not constrain the ability to meet forecast demand for Farnborough Airport”*. However, the current design has previously been stated as supporting 100,000 movements a year which is beyond the airport’s new expansion proposals.

Point 4 states the design should accord with *“Improve vertical profiles compared to the baseline published SID/STAR levels, to enable”*:

- a) *“a reduction in population numbers affected by noise”*

How can this be achieved if no noise measurements have been taken to provide a baseline and what definition of noise is being used?

- b) *“a reduction in CO2 emissions per flight from Farnborough aircraft”*.

The airport is proposing a significant increase in the number of larger aircraft which contradicts this design principle. There is also an inconsistency as the FASI-S covers all aircraft yet the discussion only considers Farnborough aircraft.

- c) *“a reduction in the volume and where possible, complexity of Farnborough Airport’s CAS”*.

This just means increased concentration of aircraft noise over fewer people or a reduction in just one flight. The use of terminology like *“where possible”* just gives the CAA the option of ignoring these concerns. In a design process such as this, *“must”* should be used not *“where possible”*.

- d) *“a reduction in the reliance on tactical intervention”*.

This was an anticipated outcome of the 2020 ACP. So it didn’t work..... so why hasn’t that been picked up in the PIR? Reducing *“tactical intervention”* assumes that pilots will follow the agreed flightpaths and heights to minimise noise disturbance and ensure safety. But they don’t as is currently the case and confirmed by the large number of complaint responses from FAL saying pilots were choosing their flightpath or delaying arrival due to congestion caused by other FAL arriving and departing aircraft.

Point 6 states *“Where lateral changes to existing tracks are required to achieve improved environmental and operational performance, options should”*:

- a) is a contradiction of the 2020 ACP design principles where flight miles were increased to reduce noise disruption. Now it seems flight miles will reduce at the expense of noise.
- b) aims to *“minimise population numbers newly overflowed”*. First, the number of people newly overflowed in the 2020 ACP should be included as they were not previously overflowed and second, the term *“minimise”* is subjective. 500,000 people newly overflowed could meet this criterion if it is better than 500,001 people being overflowed.
- c) Aims to *“avoid overflying the same communities with multiple routes to & from Farnborough Airport”* but a new departure route and holding stack is proposed over the new flightpaths introduced in the 2020 ACP that have severely impacted specific areas that were not previously overflowed south of Farnborough.

Point 7 states *“Make best use of Farnborough’s modern aircraft fleet capabilities”*. Most private jets can climb much faster than commercial aircraft and steeper departures were designed into CAP1678

for the 2020 ACP to reduce noise impact. For example, on an 06 (easterly) departure, aircraft should be at 4,000ft as they pass over the A31. 90% of aircraft do not achieve this so the “*modern aircraft fleet capabilities*” are not being used now so what will be different in the future?

PIR – Page 13

FASI-S has assumed that the FAL PIR will be concluded and any changes can be amended in Stage 3. There was no measurement of noise in the ACP or the PIR, despite it being a requirement to do so and despite it being a commitment by the CEO of the CAA (Richard Moriarty at the time) to MPs. Noise measurements will be required over a period of time and this will result in FAL missing the Stage 3 deadline and dropping out of the FASI-S process.

Pages 14 - 18

It is not clear what these pages intend to show.

Air Traffic Movements - Page 20

This data only includes the impact of FAL aircraft. It does not include the impact on commercial aircraft below 7,000ft or GA. It is therefore not complete.

Air Traffic Movements - Page 21

FAL movements peak at 186 movements a day and 23 an hour. However, there are no restrictions on the number of flights by hour or day. A restriction should be applied to limit the number of flights per hour (10/hr at weekends and 15/hr on weekdays) or day (100/day at weekends and 150/day on weekdays) and FAL should learn to operate within these limits. The needs of the public can then be met rather than just the needs of passengers and FAL shareholders.

Noise Footprint - Page 22

This data is invalid because no baseline noise measurements have been taken and because the projected implementation of lower noise aircraft (such as electric aircraft in P20) is not feasible.

Noise Footprint - Pages 23 - 25

These noise contours are only relevant for FAL aircraft but many more aircraft use the airspace. The contours should be provided using all aircraft (GA, commercial, diplomatic, Lasham repairs, military, etc). The noise footprint should also include all other sources of noise (Farnborough airport ground noise, community, ground transport, industrial, etc) as it is all noise that impacts people and causes harm. Properly measuring all noise would show a considerably different noise envelope.

Scenario Evaluation - Pages 28 - 33

These pages are not a reasonable set of options for consideration. They have been pre-selected to support the conclusion. Options such as banning GA aircraft from under controlled airspace to reduce the total noise load on people underneath flightpaths has not been considered.

The ideas of putting in a flightpaths between Biggin Hill and Farnborough just to move private jets around for the convenience of a couple of thousand people is ludicrous.

Contingency Hold Options – Page 34

One of the objectives of the 2020 ACP was to provide more assurance of flights (reducing diversions and circling from avoiding other aircraft). However, there is still a considerable amount of circling because aircraft arrive at the same time and are not managed en-route. This will get worse with the strategy of “*reduction in tactical intervention*” and an increase in flights will result in more circling to provide landing separation. Holding areas are known to cause significant disruption with many aircraft circling over the same people repeatedly at low height (e.g. Luton Airport’s new stacking

arrangements - www.bbc.com/news/uk-england-cambridgeshire-65188221). Two of the proposed stacks are south of Farnham – exactly where there are the most complaints from the public as a result of the ACP flightpaths being put over them.

Options – Pages 39 – 51

These diagrams are very hard to follow. In P39, it is of no concern that ATC intervention may be needed. That is a cost of operating aircraft and such cost is miniscule compared to the harm and disturbance caused to the public. Nor should there be any holding stack close to the airport. Aircraft should be better managed and managed en-route to avoid the need to stack. That is what the technology allows.

Because the flight information is not complete, and the consequential changes to GA have not been included, it is not possible to offer opinions on these (and any other) proposals. There needs to be proper and complete discussion with FNG to cover these issues. If this is not done, the process will fail the Gunning Principles which state consultations should ensure "*sufficient information to give intelligent consideration*" and "*information provided must relate to the consultation and must be available, accessible, and easily interpretable for consultees to provide an informed response*".